Choongsoo Kim: A "World leading, global BOK"

Farewell lecture by Dr Choongsoo Kim, Former Governor of the Bank of Korea, at the Bank of Korea, Seoul, 31 March 2014.

* * *

"The issues are global and so interlocked that to consider the problems of one sector, oblivious to those of another, is but to court disaster for the whole. While Asia is commonly referred to as the gateway to Europe, it is no less true that Europe is the gateway to Asia. And the broad influence of the one cannot fail to have its impact upon the other."

Douglas MacArthur, Farewell Address to Congress, 19 April 1951

It feels like only yesterday that I was completing preparations for my inaugural speech expressing my vision and ambition on the airplane from Paris to Seoul after being appointed Governor of the Bank of Korea. However, four years have already passed. At that time Bank of Korea were about to wrap up one Chinese zodiac cycle, which holds a significant meaning in Eastern societies, and greet a new one beginning with the BOK's 60th anniversary. I can still vividly remember promising you that I would upgrade our Bank's status by adding global competitiveness to the Bank's 60 years of tradition. It is no exaggeration to say that the goal of making a "global" and "world leading" central bank, which are so mutually interlocked, has not left my head for even a moment. This is because I have strongly believed that achieving the goal was the calling of the time for me to become Governor of the Bank of Korea at Bank's 60th anniversary.

I had a firm belief that the reform projects that I planned to pursue were essential for the BOK's development. The simple truth that, if one tries to satisfy everyone he/she will not only fail to satisfy anyone but also end up achieving nothing, was always in my mind. Thinking that extending the front lines would not help to achieve the victory, I believe I began my tenure by clarifying a clear but simple goal. With much to say to our employees and much energy, I have left more than 1500 pages of writing for our employees so far. As I have written most of this late at night or early in the morning, and not in the office or during working hours, it is the result of my tension and passion with a single-minded resolve to achieve a leap forward by the BOK. Instead of focusing on how many employees support my views, I have wanted to deliver what is right and to see people improve themselves, if only a few. I do not want to use this opportunity to recall my four years in office and list all of my achievements. Achievements will be judged in the future, by history. I would like to take this meaningful opportunity to think together with you all about the challenges that we now face, to ruminate on the motivations and principles for what we have done, and to learn lessons from them for our future.¹

¹ The reason why I have left so many writings to my fellow employees during my tenure is to allow them to go back and check whether our commitments have been fulfilled, by documenting them. Although it has been burdensome, I have done this in order to shackle myself as well. However, deciding whether to maintain this practice until the moment when I leave office has been difficult. Although I am aware of the meaning of the saying "silence is golden," having closely examined the practices of central bank governors in advanced economies, and recalling our emphases on the importance of information disclosure through communication, I have put my thoughts together in the belief that we also need to start a tradition of accurate recording. I have also considered that central bank governors' deliberations are regarded as important historical records. In this regard, I would like to leave my deliberations in the archive in the form of this farewell lecture. I believe that this is the last contribution which I can make as Governor of the Bank of Korea. Today's lecture reflects my own personal opinions, and does not represent the Bank's future policy directions, and any errors in it are fully my own responsibility. I ask for the readers' understanding about my use of colloquial language for the sake of convenience in giving this lecture, my use of foreign words without translating them into Korean, and my not providing a detailed list of references as in a research paper due to time constraints.

I would like to take this opportunity to share directly with you the questions that I have been concerned with, in the form of a farewell lecture instead of the previous custom of a farewell speech. A farewell speech to recollect our memories would of course also be meaningful in itself, in line with the natural law whereby people who meet must part. However, for an economist who has studied economic policy his entire life, and have a unique background of taking responsibility for managing diverse organizations, I thought that deliver my knowledge and experience to my fellow workers in a lecture would be both a personal privilege and a moral obligation. And this is why I have chosen the form of a lecture for this final opportunity to communicate with my colleagues as Governor.

In this lecture, I would like to talk about five issues. First, I will explain the crisis management policies that we implemented during the global financial crisis over the past six years, and look for implications for dealing with possible after-shocks in the process of normalization. Second, I will discuss the developments in monetary policy stance reflecting the changing role of central bank post-crisis, the importance of and problems with communication policies, and the harmonization between price and financial stabilization policies. Third, I will touch upon the internal reforms implemented to reform the Bank of Korea into a world leading central bank respected by the people, namely the projects based on a new creative spirit under the slogan of "Never Before." The fourth issue will be on key principles and philosophy on changes in the Bank's governance and its organization management during the past four years. Lastly, I will conclude by listing some of our unfinished long-term business and suggesting some requests to all of my colleagues for further development of our Bank.²

I. Globalization of financial crises, evolution of risk management measures and policy responses

For the past six years, the focus of individual countries in operating their economies has been on crisis management to overcome the global financial crisis.³ As you know well, the usefulness of the various theories discussed in the existing economics textbooks have become limited, and individual countries have come to face similar problems in a globalized environment where all issues are mutually intertwined. During crisis times normal policy responses, particularly those based on past experience, lose their effectiveness. Advanced economies were not able to use their policy rates, the strongest traditional monetary policy

In drafting this lecture I referred to farewell addresses by political leaders including Dwight Eisenhower (1961), Richard Nixon (1974), Tom Delay (2006) and Kofi Annan (2006), and also by other central bank governors including Jean-Claude Trichet (2011) and Mervyn King (2013). I also referred to the unofficial farewell speeches delivered by Governor Shirakawa and Chairman Bernanke at the BIS Governors' Meeting. Particularly, General MacArthur's farewell address to the US Congress (1951), which was unprecedented at that time because it was before the both houses and was historical because it summed up life's experiences, and in which he said "the issues are global and so interlocked," was a very useful reference to me, full of insight and wisdom, emphasizing the importance of a global perspective in establishing strategies and making policy decisions. It was also what directly motivated me to decide to deliver this farewell lecture. Chairman Bernanke (2014), in the annual meeting of the American Economic Association few weeks before his retirement, delivered a farewell lecture on "The Federal Reserve: Looking Back, Looking Forward," while Governors King (2013) and Subbarao (2013) delivered theirs on "A Governor Looks Back - and Forward," and "Five Years of Leading the Reserve Bank: Looking Ahead by Looking Back," respectively. As an economist, it seemed to me that delivering such speeches is a very desirable practice. This is another reason why I have decided to deliver a farewell lecture instead of just a speech, which has been the custom. Considering that in academia it is a general practice to pass on one's experience to students through a farewell lecture when retiring, I think that the central bank community also needs to build the same tradition. Part of this lecture is an excerpt from my farewell speech delivered at the BIS Governors' Meeting as the BIS-ACC Chair on February 24, 2014, in Sydney, Australia.

³ Since my views on the current economic circumstances and policy challenges have already been circulated in the results of several meetings, including with Director Generals and General Managers, those on my four years at the BOK have been published in Bank of Korea News (March 2014 edition), and those on other policy reforms have been presented to BOK staff on many occasions, I will not repeat them here.

instrument, and had to newly develop non-conventional instruments since their interest rates had already hit the zero lower bound. EMEs, with their original sin, i.e. their inability to borrow abroad in their own currencies, have had to put priority on dealing with the negative spillovers from AEs' QE policies. While trying to explore new ways of responding to unpredictable economic changes, they have at the same time had to overcome the difficulty of needing to avoid simply applying their experiences acquired under the unsuited past economic environment. AEs and EMEs are under a global economy where they are interconnected with each other but have had to remain different in terms of their policy instruments.

Past financial crises that have impacted the overall global economy include the Latin American economic crisis in the 1980s, which was the symbol of a sovereign debt crisis; the Scandinavian financial crisis of the late 1980s and early 1990s, resulting from accelerated financial liberalization; second Latin American crisis in the 1990s, which stemmed from sharp interest rate hikes in the U.S. while facing distortions in relative prices between tradable and non-tradable goods; the Asian currency crisis in the late 1990s, owing to excessive corporate debt, rigid exchange rate regimes and inadequate supervisory systems; Japan's long-term recession; and the US savings and loan crisis.⁴ Experience tells us that we cannot dismiss as a coincidence the fact that AEs and EMEs have taken turns in causing crises, while the economic boom and bust cycle is an unavoidable natural attribute in the real market economy system. We have learned some important lessons from these past crises – that, since constraints which cannot be perfectly overcome, including information asymmetries and market imperfections, always exist, we need to watch them closely, prevent the resulting imbalances from going beyond a certain level, and pay attention especially to the impacts of global shocks on our domestic economies.⁵

There is a broad consensus that the recent global financial crisis was caused by systemic risk, and as pro-cyclicality and inter-connectedness are the key parts constituting risk, it is widely known that the talks on global financial regulatory reforms including Basel III have focused on these issues. However, even though EMEs agree with the consensus, they have especially faced a dilemma in choosing between preventing financial crisis recurrence and enhancing the competitiveness of their own financial sectors. While in order to restrain regulatory arbitrage the same principles must be applied to all economies, application of the same rules would result in the irony of EMEs, with less developed financial sectors, having to bear larger costs than AEs, which caused the crisis. In this regard, we will need to gradually explore more harmonious ways. Judging from past crises, the recent crisis can be

⁴ When I became Dean of the Graduate School of Pan-Pacific International Studies at Kyung Hee University in 1998, I created a course called "Economic Crisis Management" in a government-funded Master's program for EME public officials. I believe this was the first course on crisis management ever established in Korea. There were requests from foreign universities for the course syllabus, and other governments showed great interest in the course as Korea had just experienced the currency crisis of 1997, and the world was paying close attention to how Korea will implement the IMF bailout program. At the request of the government, I visited numerous cities with many businesses with Korea including Los Angeles, San Francisco, Tokyo, Osaka, Hong Kong, Singapore and Canberra, and explained to their opinion leaders including policy makers, academics and journalists about the IMF program and the Korean government's efforts to overcome the crisis, and led discussions on this. I believe this experience help me greatly to understand economic crisis. A case analysis of economic crisis management is included in the lecture on "Financial Crises and Policy Responses: A Korean Perspective" that I delivered to Policy Board members and executives of the Bank of Japan in the Tripartite Governors' Meeting on August 3, 2010.

⁵ It would not be far from truth to say that the creation of the US Federal Reserve is the empirical evidence showing that responding to financial crises is the original duty of the central bank. The Fed was created in 1913, after long consultation, to address the financial crisis that had caused bank runs in 1907, and its functions were settled on in going through the Great Depression (Bernanke, The Federal Reserve and the Financial Crisis, Princeton University, 2013).

characterized as a comprehensive one⁶ which has had all of the characteristics of the various other crises I have listed above.

Greatly affected by changes in the external environment, we have had limited policy choices in this kind of situation, and making decisions contingent upon changes in the global financial markets has been regarded as desirable. The most difficult part of this strategy, however, was having to bear the burden of making accurate judgments concerning variable external conditions. Policy makers in Korea tend to make their decisions by focusing on domestic-specific factors from a domestic-oriented point of view, without devoting much attention to external factors. And in this case they fall into a dilemma. Their failure to recognize changes in the external environment usually means that they fail to fully take the crisis situation into account, and that past experiences applicable only to peacetime dominate their decision-making.⁷ If the central bank is given just a single mandate of price stability, it can come up with a consistent policy mix. However, when it has the additional mandate of financial stability, it would be best to pursue appropriate harmony while reducing the possibility of policy conflicts. In other words, it would be desirable to choose the so-called second best option, where the achievement of either one of its two mandates is neither satisfactory nor unsatisfactory.

Let me add a few more words about the policy authorities' concerns. If limits on the role of fiscal policy in overcoming an economic crisis appear, then it is natural to expect a more active role for monetary policy, but there are constant controversies at home and abroad about what extent of such a role is appropriate. In terms of monetary policy there may be differences in perception of what is an "accommodative stance", however the fundamental issue is to determine whether more accommodative policy will lead to desirable results. This is because we need to keep in mind that any policy entails costs. Rather than looking whether a policy is Keynesian or not, from the economic philosophy point of view, we need to see the issue as being whether we have experience based on empirical analysis. For example, some European countries including the UK have implemented fiscal tightening policies to stick to the EU agreement that fiscal deficits should be maintained at within 3% of GDP, and these attempts have even at times been criticized. Recently, however, there have been signs of economic recovery as a result of the conduct of such policies to ensure fiscal soundness. Monetary and fiscal policies are fundamentally for operating the macroeconomy. and, to increase productivity for the purpose of enhancing the economic growth potential, restructuring efforts should be made at the same time. During times of crises we tend to be blinded by short-term views, however, and this distinction becomes vague. Looking at it dispassionately, anyone should recognize that costs continue to be accumulated structurally. Nevertheless, in a situation in which short-sightedness dominates as if there were no tomorrow, we face difficulties in not straying from basic principles even while satisfying this to some extent. I think that conducting monetary policy while being skeptical about financial stability is a fundamental concern.⁸

⁶ The development of financial engineering including derivatives, and the consequent rapid extreme advancement of financial liberalization, sharp increases in public debt, contagion effects of QE policies on neighboring economies including negative spillovers from QE policies, rigid exchange rate regimes, harm to innocent bystanders from increased global financial market volatility as a result of increased global liquidity brought about by QE policies, and the lack of financial regulatory and supervisory regimes

⁷ For instance, Taylor rule can be considered in research but even US Federal Reserve depends more on the optimal control rule and regards the Taylor rule as ineffective during crisis times. It does not seem appropriate for policy makers in Korea, in analyzing their policy directions, to use the estimates of the Taylor rule, with its time series also including normal times.

⁸ Concerns similar to these have recently been raised at the FOMC meeting. These debates are expected to continue in the processes of QE tapering and interest rate normalization. Please refer to Jeremy Stein, "Incorporating Financial Stability Considerations into a Monetary Policy Framework", March 21, 2014.

To be more specific about policy concerns by looking at an example, the biggest challenge in crisis management is that while it is difficult to find measures minimizing type I errors in policy implementation, this process unintentionally create type II errors frequently. Since the costs of a type 1 error of not foreseeing a crisis coming could be politically lethal, particularly in an environment of deepening globalization, we cannot help but be conscious about the probability of tail risks evolving into systemic risk. We can therefore easily make a type II error, of sending the wrong signals, by talking about the issue of tail risk even when the chance of a crisis arising is not so high. And if such errors accumulate, the subsequent social costs cannot be ignored. Further, given the self-fulfilling psychological effects of a type II error, the adverse effects cannot be downplayed. Although the cost may not be very evident right now, as a policy decision-maker and an economic expert this is an issue that one cannot but feel considerable intellectual burden.

The most outstanding phenomenon of the global financial crisis has been the surge in global liquidity, which is an aftereffect of quantitative easing. It is very natural that abundant liquidity brings about changes in prices and amplifies the degree of market volatility. In carrying out policies in an open economy system, especially for a small open economy, low volatility in foreign exchange rates play a very important role. As trend of globalization progresses, the importance of foreign exchange rates is becoming ever greater.⁹ Judging from our experience, foreign exchange rates have been proven to over-shoot, markets to overrespond and therefore policy authorities are often observed to have the tendency to overreact. This means that there is an immanent risk of maximization of type II errors. A case in point is implementing a policy without considering how much the potential growth rate has declined. I do not think that I need to emphasize the importance of the GDP gap again here. as it is the economic variable that has received the most attention and been discussed the most recently. If the potential growth rate declines and policies are implemented without considering this, there is the danger of overestimating the negative GDP gap in absolute terms in a time of crisis, and this could lead to excessive policy responses. The expression "excess" itself already means that there are social costs entailed. It has taken courage to make the efforts to escape this trap over the past several years, and so it is very regrettable that the importance of these efforts has not been well recognized. Looking back in the future, this may come to be seen as an additional social cost that we have had to pay to overcome the global financial crisis. QE has been assessed as an appropriate choice, compared to what would have otherwise been the case (i.e. counterfactual analysis). Of course, we should end QE and carry out exit strategies in an appropriate manner now, while the net marginal contribution, which considers QE's advantages and disadvantages, is still positive. think this is a policy issue that national policy makers should keep in mind.¹⁰

Even though signs of our having overcome the crisis are now detected in every corner of society, we should not ignore the fact that crises in many cases cause aftereffects. And these

⁹ The importance of exchange rates in managing Korean economy has long been stressed. Although the importance of a weak won was emphasized for promoting and supporting exports during the development era, it is time to break from this old view in order to maximize public welfare through economic advancement, and exchange rates should be determined based upon market fundamentals and macroeconomic conditions. If the degree of exchange rate volatility widens owing to international financial market unrest, however, there is a need for controlling the subsequent uncertainty to some extent by taking macroprudential policy actions, and this need seems to be globally recognized.

¹⁰ It is very tricky to judge this in reality. For instance, it is hard for central banks not to consider criticisms that they will drive their economies into recessions when trying to normalize interest rates, and in this case they tend to make risk-averse decisions in order to escape social criticism. In particular, if they make more rosy forecasts for their economies than other institutions, they will face criticism of not predicting risk properly and being complacent. Of course, central banks need to overcome such groundless arguments made for the sake of criticism only. It is not that central banks tend to cry wolf intentionally, but it is safe to say that they have the intention of heightening the sense of vigilance by releasing pessimistic forecasts in a situation of prevalent uncertainties, if they are not up to delivering accurate economic analyses.

aftereffects are highly likely to amplify volatility, as the special conditions of EMEs could create contagion effects in the international financial markets in the process of interest rate normalization.¹¹ Although understanding the external environment requires experience, and is not easy, it is essential to remain vigilant while equipping ourselves with international viewpoints, in consideration of our economic situation in which we are vulnerable to external shocks.¹² It is safe to say that the time is over when we need to tiptoe on thin ice; we should not forget that knowledge and wisdom are continuously needed to keep balance while we walk on the border line.

II. Changes in monetary policy in line with the greater role of central banks since the global financial crisis, bright and dark sides of communication policy, and balance between price and financial stability

There is no area that has experienced greater change in the process of our overcoming the financial crisis than monetary policy. As suggested in the rhetorical expression "the worst crisis in 100 years," the usefulness of theories and experiences formulated in the past has been considerably constrained, and as the borders among countries have disappeared due to globalization, the lines between economic policies have been blurred and policies have become interdependent. Since the government's policy measures have shown their limits, the economy has begun to rely on the role of the central bank, and this has been well demonstrated in the cases of advanced economies where various unconventional instruments have been employed due to the constraints imposed by the ZLB. The expression "unconventional tools" itself implies active central bank activities, even though the instruments are an inevitable choice given the ZLB. And, in consequence, the introduction of similar policies was expected in EMEs as well. In the political context, there was a view that EMEs had reached their effective lower bounds and therefore it was difficult for them to lower their interest rates further. And so there was no wide range of practical policy choices available.¹³ Many academic issues have been raised including revisiting the role of the

¹¹ After Chairman Bernanke's May and June 2013 press conferences concerning the possibility of QE tapering, the international financial markets fluctuated greatly, and this was called the Bernanke Shock. Right after the FOMC meeting on March 19, 2014, Fed Chair Yellen said that it will take "a considerable time" for interest rates to be normalized after the end of QE tapering. Following her explanation that this period could be about six months, stock markets in Asia including Korea declined dramatically in a case of market overreaction. I do not think it is right to regard these as an unintended and inappropriate show of intent, but think it should be viewed rather as evidence that the FRB has always thought of the need to attempt to test the markets and reduce future shocks. However, it is important for us to note the possibility that certain EMEs may not be able to be endure interest rate hikes in the process of interest rate normalization, just as in Mexico in 1994, and that the negative effects could spill over to other nations.

¹² This does not indicate that domestic views are right or wrong. Bernanke (2013) says that a "central bank is not a regular bank, it is a government agency". However, my expression that the Bank of Korea is also a government agency from a broad perspective has been regarded very negatively in our nation. Although there is a unique historical legacy in Korea, this means that Korea is still stuck in past ideology rather than moving toward the future.

¹³ There was a view on the one hand that there was room for changes in interest rates in EMEs, since they were not facing the ZLB, while on the other hand there was a view that, given that their currencies were not key reserve currencies, there was in reality no room for further cuts in their policy rates. For example, it is interesting that when Korea's Base Rate was 2.5% the policy rates of a number of other EMEs including Australia, New Zealand, Thailand and Poland remained at similar levels. Despite the differences among them in many macroeconomic variables including potential growth rate, inflation expectation, employment rates, that should be considered in deciding policy rates, their base rates were similar. This therefore could be the subject of not only theoretical but also empirical analysis, and I raised this issue officially at the Jackson Hole Meeting in 2013. Just as the US and Japan were facing ZLB under the different economic environments, I raised the point that those EMEs were also in the same situation of facing effective lower bounds. Recently, Thailand cut its base rate and New Zealand revised its rate upward, in accordance with their domestic conditions. Of course, exchange rates are not said to be the direct target of monetary policy, except in the case of a currency board system like that of Hong Kong, but we should in reality carefully observe the linkage between exchange rates and interest rates.

central bank. However, the most important task is to discuss the objectives of monetary policy, the role of the central bank in terms of asset price stability, which is the key to harmonization of price stability with financial stability, and the usefulness of communication as a monetary policy instrument.

First of all, over the last 20 years of the so-called Great Moderation, it was believed that low inflation and growth could coexist, and the argument is already also widely known that this confidence in fact sowed the seeds of the global financial crisis. Ultimately, this argument raises the question of whether it is appropriate for central banks with a single mandate of price stability, like the Bank of Korea, to maintain so-called (flexible) inflation targeting. In a situation where inflationary pressures from the demand side are low as GDP gaps have been negative for a considerable period of time worldwide, this debate has been raised with central banks with a dual mandate of price stability and maximization of employment like that of the US FOMC in mind.¹⁴ An argument that it is desirable to move toward price level targeting has been raised, and at the same time an argument for adopting nominal GDP targeting has also strongly emerged.¹⁵ Realistically, inflation targeting was suggested in the early 1990s,¹⁶ and not a single country that has adopted this regime has ever given it up. Although a specific policy cannot bring about results that satisfy everyone, we cannot say for now that the shortcomings of inflation targeting outweigh its strongpoints. This is especially true in Korea, where an inflationary bias has been prevalent for so long.¹⁷

Next, since the mandate of financial stability has been given to central banks, very active debate has developed concerning what measures that central banks should implement and what roles that they should play in regard to asset prices. As the real-financial linkages have been pointed to as the main culprit behind the global financial crisis, the debate on so-called

¹⁴ We need to understand that the mandates of different central banks vary. For instance, the FRB has two mandates of macroeconomic stability and financial stability, and the FOMC, which decides monetary policy, has a role in maintaining price stability and maximum employment as stated in the text above. The Bank of Korea Act defines the role of the central bank as ensuring price stability. And with the revision of the Act in 2011, the narrower range of the Bank of Korea's mandate has been specifically stated as price stability, with consideration also to be given to financial stability.

¹⁵ In early 2013 I published a paper titled "Monetary Policy after the Global Financial Crisis" (The Korean Economic Forum, No. 1, Vol. 6, pp 23–55). It was the first such attempt by a BOK governor, and I was trying to use it as an opportunity to explain the monetary policy issues that were being raised internationally at that time and to seek academic opinions on a new definition of central bank roles. It was part of my effort to create a chance to broaden the horizon for discussions that had in the past been limited only to the narrow definition of central bank functions. Please refer to this paper for discussions of various monetary policy regimes.

¹⁶ Last year I changed the name of the Price Report that the Bank of Korea has long issued, to the "Inflation Report." The price level and inflation are two different concepts. Although Korea does temporarily experience low inflation, since this does not mean low consumer price levels basically it is inappropriate to use the price level and inflation interchangeably. The policy target is inflation, and not the price level. And so I thought it was right to distinguish the two, especially in a situation where price level targeting was being discussed, and therefore renamed the report. Considering that inflation targeting had been used as price stability targeting for so long, however, I did not change this wording. I think that it will be desirable to change this term as well when the time is opportune.

¹⁷ Of course, as inflation has remained low recently, issues are being raised as the effectiveness of BOK's inflation targeting. This comes from concerns about deflation. As I explained in the press conference right after the March MPC meeting, however, it is not practical to worry about deflation, considering that international commodity prices including those of oil and grains are low, and that even though inflation is low it is not a broad-based phenomenon (core inflation is at over the mid-1% range), and that our economic actors' inflation expectations have been well anchored at around 2.9% for a long time. Nevertheless, when deciding the inflation target for the 2013 to 2015 period, we lowered the upper bound from 4.0% to 3.5%. I believe that this was appropriate in terms of managing economic agents' inflation expectations, but it is very regrettable that we could not reduce the lower bound to below 2.5%. This also reflects our inability to break from our inflation than in dealing with deflation.

cleaning vs. leaning against has emerged¹⁸, i.e. whether central banks should place more emphasis on crisis resolution, as the usual lender of last resort, or on ex ante crisis prevention. Prior to the global financial crisis, of course, nothing could being about conclusion that satisfied everyone. Before the crisis broke out, a general view was that central banks are responsible for price stability through their monetary policies, and the regulatory or supervisory authorities for the duties related to financial stability. And papers placing emphasis on the importance of financial stability had been released only by the BIS and some other organizations. Needless to say, however, numerous central banks have focused on the importance of "leaning" since the financial crisis, and it is a matter of common knowledge that they have generally come to have more financial stability-related duties compared to in the past. In reflection of this trend, the Basel III global standards have been enacted over the past several years, while the Volcker Rule was created in the US.¹⁹

However, with Eugene Fama and Robert Shiller having become co-recipients of the Nobel Prize in Economics in 2013, together with Lars Hansen, we can see that academic economists have in actuality faced a psychological shock. The fact that two scholars, well aware that their individual theories are antipodes to each other and thus incompatible, were jointly awarded the prize can only be understood as proof that the actual states of the financial markets are in great chaos. This implies that both views were recognized, although the theory claiming the efficiency and rationality of the financial markets and that there was no bubble, and the analysis that there was a bubble in asset prices due to irrational and inefficient behaviors based on the behavioral economics of human beings, conflict with each other.²⁰ This can be seen as reflecting the truth that, after all, the markets operate based on a mixture of rational calculation and irrational emotional behavior. This dispute has caused great difficulties for defining the central bank's duty regarding financial stability. This is because especially the argument that markets move in a rational and efficient manner supports financial regulatory easing, while in contrast the assumption that the markets are irrational encourages tighter regulation. This even raises the fundamental guestion as to whether interest rates, the key monetary policy instrument, can be utilized as a macroprudential tool for financial stability.²¹

Third, communication has emerged as an important monetary policy instrument. Most of us understand that, for advanced economies under the ZLB condition, communication with the markets concerning the process of changes in interest rates, through forward guidance, is inevitable. Firstly, even if the US Federal Reserve exits QE before the end of this year, the key question would be the duration of the QE of the ECB and the Bank of Japan, and in the changes in their sizes. And afterwards attention will be paid to the implementation date of

¹⁸ Please refer to "Should Monetary Policy 'Lean or Clean'?" August 2009, William White, FRB-Dallas, for a discussion of the policy issues related to this. Since the voices for 'clean' have been relatively smaller since the global financial crisis, Stein (2013), "Lean, Clean, and In-Between, the NBER Conference" discuss practical issues related to implementing 'lean' policy, which was of real interest.

¹⁹ It is not included among the topics of this lecture, but concerning the discussion as to whether massive regulations like Basel III will be effective please refer to Haldane, BOE, "The Dog and the Frisbee," Jackson Hole Conference, 2012.

²⁰ At the time the foreign press used the expression "Rational Irrationality", and the Nobel Committee issued a comment that "The Nobel Laureates have laid the foundation for the current understanding of asset prices." This can be seen as an interpretation that both sides have some grasp of reality, because it is significant to observe the rational analysis capacities of economic agents on risk, while considering the impacts of the behavioral biases based on mass psychology and of market imperfections are also needed. This can be the most difficult problem facing today's economy.

²¹ For this reason, "When Capital Adequacy and Interest Rate Policy Are Substitutes", BIS Working Paper 379, Cechetti and Kohler (2012), emphasizes the importance of coordination between monetary and macro-prudential policies. Korea is assessed as having carried out macro-prudential policies relatively well. For the findings of empirical analysis please refer to "Macroprudential Policies: Korea's Experiences," IMF Conference on Rethinking on Macro Policy II: First Steps and Early Responses, April 16–17, 2013, IMF, Choongsoo Kim.

their exit strategies which would be a part of a sequence to normalize interest rates. The Bank of Japan has been implementing forward guidance for a long time, and the US Fed has been managing market sentiment by continuously changing its criteria - "for an extended period", calendar-based criteria, a threshold-based criteria for major state-dependent indicators such as the unemployment rate and inflation, and a data-dependent criteria. It is important to understand the fact that communication and forward guidance are economic policy instruments, not general communication. Since some play up only the communication aspect, it is sometimes even understood to mean disclosure by the central bank of its monetary policy direction for the following month. A good example of this is the controversy related to the timing - why next month, and not this month? We should not think that it is the role of the central bank to conclusively indicate that short-term interest rates will move the following month. And since monetary policy has an effect only after a considerable period of time, it is the level at which the policy rate is maintained from the medium-term perspective that is actually important, and it cannot be normal to conduct monetary policy focusing on a short-term timing issue.²² Of course, forward guidance also has its own weaknesses. If there are errors in the forecasts for the variables used as indicators, such as the unemployment rate, it is natural that this will negatively influence confidence in the central bank. That is why the importance of the central bank's forecasting capacities is being emphasized more.

A good example guaranteeing the effectiveness of Forward Guidance, with the aim to keep long-term market interest rates stable and low by maintaining QE and postponing interest rate normalization, is the use of Optimal Control Rule by the US Federal Reserve to allow public anticipation of the interest rate channel.²³ However, the effects and significance of communications may vary depending upon whether there is room for policy instruments or not. This is because various issues – such as whether policy has a clear goal, whether the policy transmission power is sufficient, and the degree of understanding of policy by the economic agents regardless of their interests – are intertwined in a multi-faceted way. The policy content can be damaged by indicating the content that one does not agree with as inappropriate communications even though one actually understands the content. Of course, if one regards all of these things as no problem as long as there is confidence in the monetary authorities, then all burdens will fall on the policy authorities after all.²⁴

²² It is unprecedented even for some scholars to argue for short-term timing of the Base Rate decision. Especially since the results of the voting on the Base Rate decision began to be released, excessive interest is being given to whether individual members voted for or against the decisions. What happened to the US Federal Reserve in December of last year is a good case in contrast. QE tapering had been at the center of attention, and the decision against tapering was made by a 9:1 vote in September 2013, after which the decision then changed to a 9:1 vote in favor of tapering in December. It is interesting that this change in the decision concerning what kinds of changes in economic conditions between September and December had caused a shift in the policy decision from 1:9 to 9:1. Especially given that the one member who voted against tapering in December were not the same person, all members are seen to have made decisions different from in the past.

²³ It is necessary to understand the process of development in communication policy, considering the fact that, after Yellen (2012) noted the optimal control rule, a theoretical background for forward guidance, in "The Economic Outlook and Monetary Policy," New York, English et al. (2013), in "The Federal Reserve's Framework for Monetary Policy – Recent Changes and New Questions," FRB, and Reifschneider et al. (2013), in "Aggregate Supply in the US: Recent Developments and Implications for the Conduct of Monetary Policy," IMF, presented alternatives to the Taylor Rule since it cannot be applied under ZLB conditions, and at the same time provided theoretical and empirical ground for the role of monetary policy in a situation where US potential growth is declining.

²⁴ The fact that the quantity of information is large is not necessarily directly proportional to its being clear. This is because economic policy is fundamentally the consequences of choices, and economic phenomena are complicated as I mentioned before, and if various conflicting information is not properly divided up it can actually cause confusion in decision-making. That is why some say that one-handed economists are needed. I think that the content of the Monetary Policy Committee meeting statements became richer and their sentences clearer during the past four years. A paragraph on judgement of the international financial markets

Which indicators to develop that would allow reaching of consensus²⁵, and whether the MPC's understanding of the changes in economic conditions will be consistent with the experts' views, will be keys to the whether Forward Guidance could be implemented in Korea.²⁶ There should be a premise of rational acceptance in areas where interests are intertwined. If Forward Guidance is attempted in a situation where these foundations have not been built, then the efforts to create noise will actually be greater and it is expected to be very difficult to achieve the expected results. From now on efforts should be focused on raising the awareness of economic agents, by for example strengthening education on finance. And it is of course important to guarantee the central bank's decision-making independence from politics, the government and the markets. This independence should however not impede a sound venue for information exchange²⁷, and communication policy should act to supplement this and strive to create such conditions. Furthermore, we have now reached a turning point where we have to some extent overcome the Global Financial Crisis that lasted the past five to six years, and are pursuing a new normalization. Which policies will be chosen at this critical moment is expected to be an important cornerstone for determining the future directions for development.

has been newly added, and the GDP gap, inflation expectations, and decisions made over a medium-term horizon are newly added concepts. The release dates for the minutes of the MPC meetings have been moved forward to two weeks after the meetings, from six weeks, and discussion of many issues has been taking place in the press conferences after MPC meeting. Yet issues of communication still come up all the time. I think that this seems to be largely because, although the monetary authorities give information in order to facilitate anticipations of long-term interest rate trends over the medium-term horizon, there seems to be some misunderstanding that the information is intended to provide notification of the directions and times of changes in short-term rates, as I mentioned in the previous footnote.

- ²⁵ When fluctuations in the economy are based on external factors, rather than domestic ones, the indicators to be utilized for Forward Guidance will be limited. Neither the GDP gap nor the unemployment rate can be useful indicators. In addition, the GDP gap results can vary depending upon the method of its estimation. Therefore, differences of opinion may appear when it comes to using the GDP gap as an economic indicator.
- ²⁶ Concern has recently been raised over the effectiveness or negative side-effects of Forward Guidance in advanced economies. Chris Giles asserted, in "Four Problems that Question the Efficacy of Forward Guidance," Financial Times (Nov 14, 2013), and Charles Plosser (2014), in his "Perspectives on the US Economy and Monetary Policy" speech at the Banque de France, that if it is unclear how Forward Guidance will end, it may head somewhere different than initially expected. Filardo and Hofmann (2014) noted, in "Forward Guidance at the Zero Lower Bound," BIS Quarterly Review, that qualitative FG was preferred over quantitative FG, based on the concern that confidence in the central bank might be damaged if its predictions turned out to be wrong, and presented an analysis that attention should be paid to the fact that giving a signal that low rates will persist for a long time might consequently cause a risk of financial instability. Meanwhile, given that in the March FOMC meeting the unemployment rate indicator was removed from F,G and a quantitative method was changed to a qualitative method, when economic conditions change over time FG also cannot help but be changed accordingly.
- ²⁷ It is natural that there are various opinions and interpretations when it comes to understanding economic phenomena. However, raising an argument without any logical basis can only be seen as noise, rather than a signal. It is very odd that there has been no dispute as to whether the tapering decision came too late or not, even though the US Federal Reserve, after hinting in May last year of possible tapering, actually tapered in December rather than in September as expected by many in the markets. Except for Korea, it is very difficult to find cased on the global stage where the numbers of times when policy rates have been kept frozen are debated. We have experienced Base Rate hikes and cuts on a total of eight occasions, and I would like to know why the Korean financial markets should have changed more frequently than the economies of other countries, given that changes in their policy rates have been made seven times in the same period by the ECB, Russia, China and Turkey, and six times or less by the Philippines, Taiwan, Mexico and Malaysia (setting aside the US, the UK and Japan where no policy rate changes have been made). If one expects the Bank to move rates frequently, like Brazil or India where there is inflation risk and where domestic financial markets are instable because they are influenced largely by the international financial markets, it would be inappropriate given the Korean market conditions. If we implement Forward Guidance in the future, we should look into ways of dealing with these noise-inducing, albeit unintended, phenomena.

III. Pioneering a new creative spirit of "never before"

The achievements that I have accomplished with you all over the past four years are reform tasks that can be symbolized by the expression "Never Before".²⁸ The expression "The first time since the Establishment of the Bank of Korea" carries doubts as to whether such new tasks can always turn out to succeed. Why have they not been tried before? I believe that perhaps these new tasks were begun just now because a clear vision had been set. In other words, concepts such as "World Leading" and "Global" can be seen as guidelines for creating new ideas. If there is no clear sense of purpose, people tend to repeat what they did in the past. If you guarantee those who have ideas and take the initiative become their owners, it would be difficult for anyone to stop continuation of these trends.

By grouping achievements of the past four year into several categories and highlighting their characteristics, we would find following suggestions for making the BOK's reform more distinguished and effective, i.e., for making the BOK a capable organization. Internally, first, we can list efforts for intellectual accumulation, in order to make a leap forward to a knowledge institution, and efforts to reorganize our institution in terms of organizational management. Externally, we can list efforts to actively protect our national interests, and efforts to cultivate the supremacy of our BOK staff. Let me briefly look into these four sets of efforts now.

First, concerning our efforts for internal intellectual accumulation, it is important above all else to make employees realize the importance of intellectual property rights, and I think that this has contributed to active promotion of our Issue Note and Discussion Paper publications, and of joint research activities with external organizations. The number of research papers increased sharply from 42 in 2010 to 105 in 2013, and starting from five cases of international joint research in 2011 that number increased to 20 in 2014. This revolutionary change, to an extent that makes any comparison to past figures meaningless, has been possible thanks to the excellent potential of our BOK staff. In fact, the greatest achievement of all is that we have found and confirmed our potentials. The building of our 「Archives」 are laying a foundation for a World Leading BOK, and our first publication of the 「Golden Book」 can be a sample of the expression of new ideas.²⁹ Given that the institutions already equipped with Archives and surveys of regional economic conditions are those in countries more advanced than Korea, while countries less advanced than ours do not have them, we can realize that we are moving in a desirable direction.

Next, concerning the efforts to reorganize our institution internally, priority should be placed on strengthening intellectual capacities and a focus should be given to fostering employees' potentials and maintaining their expertise as Bank's staff members. The establishments of the Bank of Korea Academy and the Communications Department were expressions of my interest in departments that create externalities, which can easily be neglected in public organizations. The giving of appropriate consideration to those who work for such departments reflects the degree of maturity of an organization. An immature organization tends to focus on issues of individuals more than on those of the organization. It also must

²⁸ This is a quote from "Never was so much owed by so many to so few", one of the most eloquent speeches of Winston Churchill, and is used as a rhetorical expression meaning "the first time since the establishment of the Bank of Korea". I think that the expression "never before" has a plain meaning of a first trial, and, hoping that such a spirit would last going forward, I chose this expression from the perspective of establishing new concepts, as exemplified by the "Seven Major Reports of the Bank of Korea".

²⁹ The basis of the first publication of the "Golden Book" lay in a fundamental question as to the central bank's functions. This was whether the central bank should carry out its business based only on the situation or opinion of the central government. This should be seen as an attempt by the Bank of Korea to understand not only the local economic situations but also various economic issues, and to cope with them with interest as needed, since we think that all people in our country should be objectives of the central bank's business and since the Bank has 16 regional representative offices in operation.

not stay in its place, but evolve. The decision to make our Reserve Management Group a semi-autonomous body was made in order to improve efficiency. A reward system should be developed for those creating externalities, and only in this case will the organization be operated as it should. We sometimes forget the fact that some people need to pave the road for those wishing to drive. Underdeveloped countries suffer from heavy traffic jams since they have not paid attention to this fact. The same can be said for organizations: those neglecting manpower restructuring might experience difficulties in personnel management including promotions. We developed the CDP system, which allows our staff to determine their own areas of expertise based on a wide range of experience, to help them decide on their future paths.

Looking outside, it is no exaggeration to say that over the past few years the entire world has been struggling to carry out a thorough international financial reform in an effort to prevent another financial crisis.³⁰ Unlike in the past, experts at the BOK have joined actively in these efforts to set international norms. For instance, while the details of Basel III were being shaped we attended international forums to represent Korea's interests, and at the same time kept the parties concerned in Korea regularly informed of how things were progressing, so that they could prepare themselves. We have made substantial contributions both externally and internally, and this has been an opportunity for us to demonstrate our potential to join the ranks of advanced central banks. Moreover, our staff working in international organizations such as the BIS and leading foreign central banks have not only achieved personal development but also disseminated the global standards to their colleagues at the BOK, helping them to have clearer understanding of these standards.³¹ We will try to utilize our local currency swaps, centering around trade settlement, particularly with countries on which we depend heavily for imports of raw materials and have established real economic exchanges such as FTAs. We will strive particularly to expand our areas of exchange to include Islamic banking with countries having abundant crude oil and other natural resources and massive volumes of sovereign wealth funds, as well as with Australia. I believe that such efforts will provide a turning point for our bank to expand our fields of business.

Based on the combination of all of these factors, the Bank of Korea is establishing its status as Korea's top knowledge institution, and our staff are able to make active contributions to producing reports of high standard. Just like in advanced country central banks, we should manage Bank of Korea so as to encourage more staff to write, and to reward those producing valuable writing for their contributions to our organization. This means that an organization can move on to the next level when led by people with original ideas. In conclusion, "Never Before" cannot be achieved by complacency and daily routines. I would like to stress that "Never Before" takes pain and patience to achieve.

³⁰ The Bank of Korea has participated in various international fora, which would have been unimaginable in the past, in an effort to present logical explanations of our position on the one hand, and to contribute to the setting of international norms for the development of global economy on the other. I am confident that we have performed remarkable activities. Although the Bank of Korea is neither a supervisory nor a regulatory authority, I have served as Co-Chair of the FSB-RCG for Asia, and other of our executives and department heads have also performed various activities. Particularly, we have promoted a clearer understanding of phenomena particular to Korea in the setting of the global financial regulations, thereby contributing to our nation's interests. At the BCBS, the Bank of Korea contributed to the inclusion of financial debentures issued by domestic specialized banks in high-quality liquid assets, and to the acceptance of Monetary Stabilization Account deposits as cash inflows. Our bank also contributed to representing the national interest by having domestic conditions considered appropriately in the application of credit conversion factors. Meanwhile, in this global era it is decisively important to participate in international agenda setting. Since it is extremely difficult to represent the national interests in agendas determined by others, we must not miss the chance to participate in agenda setting. I think it is now time for the Bank of Korea to achieve such a position in every aspect.

³¹ For the first time in the history of the Bank of Korea, its governor was invited to participate in discussions at renowned international forums including those of the G30, the Bretton Woods Committee, Davos, the Economic Club of New York and the IMF Special Conference during my term. And it is now naturally expected that our bank will participate in these forums.

While we have sought "Never Before" as part of our efforts to pursue becoming a World Leading Global BOK, our philosophy in organizational management has been to remain competitive. It is important to create a system for internal competition, but ultimately we have sought international competitiveness to contribute to the national economy. We are well aware of the hardships that our ancestors endured during the so-called the Enlightenment Period of Joseon Dynasty in the late 19th and early 20th centuries. They were totally uncompetitive, without any new weapons to protect themselves from those of the West.³² Our efforts can be said to be similar to the reforms brought to the Korean soccer field by Guus Hiddink, in the sense that he stressed the importance of taking a global view. Although we know that global competition.³³

IV. Strategy and organizational management philosophy for becoming a world leading central bank

The basic principles governing the operation of the Bank of Korea over the past four years can be summarized as involving our asking ourselves three questions: "Why a Global BOK?"; "What is the Bank of Korea for me, and what am I for the Bank of Korea?"; and "Why should such expressions as 'core department' and 'policy department' no longer be used, and innovation take place from the periphery and not at the center?" You should keep these questions in mind and try to resolve them through your entire lives. It is interesting to find that the recently released details of the Bank of England's reforms are similar to what we attempted four years ago.³⁴ Our efforts to return the Bank of Korea to the public are aimed eventually at helping our staff to integrate into society. BOE Governor Carney also asks "What is the Bank of England for?", saying that the BOE's goal is to promote the welfare of

³² This is cited from 「Korea and Her Neighbors」, written by Isabella Bird Bishop in 1898 and translated into Korean by Lee Inhwa in 1994. I have mentioned this book frequently in meetings with department/team heads. It is an internationally sensational narrative describing the miserable situation of Korea, which was an isolated society with wide spread corrupt and late to globalization, forced to open up its ports following foreign invasions during the so-called Enlightenment Period of Joseon Dynasty. Some of the latter part of the writing is about Koreans realizing their potential in a foreign country with well-arranged systems, and the writer predicted that Korea would emerge in Asia once the country could arrange its systems successfully, a forecast that has turned out to be true. The book includes dramatic descriptions through a foreigner's eye of the importance of systems.

³³ Even Hiddink was not successful in the beginning. He was not free from the general principle of reform that it worsens the conditions first and then achieves the effect of improving them over time. It takes time to break down old systems and set up new ones. Hiddink's team kept losing 5 to 0 for some time, which earned him the nickname "5 to 0." Conflicts involving the selection of players – between outstanding players under the old paradigm and rising stars of a new system – were also drawing attention.

³⁴ The Bank of England announced its restructuring on March 18, 2014 (Mark Carney, "One Mission. One Bank. Promoting the Good of the People of the United Kingdom," March 18, 2014). The BOE's removal of silos is similar to our abolition of the occupational group system, and its giving the Chief Economist responsibility for coordinated research across departments is comparable to the BOK's setup of a research committee dedicated to comprehensive research. The BOE's appointment of new figures, including the second appointment of a female deputy governor in its 300-year history, has revitalized the atmosphere within the bank. These efforts to modernize the organization demonstrate a desire to make it competent. The BOE has begun to reconsider its longstanding practice of secrecy of information. The BOE's advocacy of "One Bank" can be understood as an effort to remove the concept of so-called core departments and to create an atmosphere in which every member can compete on an equal footing and work in cooperation. It is interesting that, in short, the characteristics of BOE's reforms mentioned above have many things in common with the purpose of our BOK's reform. It should also be noted that the Bank of England, a representative leading central bank established in 1694, with the objective "to promote the public Good and Benefit of Our People." also mentions "silos" and "secrecy." It is a well-known fact that, if there is an information gap leading to information asymmetry, herd behavior naturally occurs, and moral hazard and adverse selection become wide-spread. Both advanced and emerging market central banks should place their priorities on dealing with these issues, even if the degrees may differ.

the people. Governor Carney has been able to take a fresh approach to internal issues, since he is an outsider with a variety of experience in both the government and the private sectors.

In reality it was not easy for me to convince why we need "a Global BOK" This guestion may now seem to be beyond doubt, but four years ago the accelerated innovation in financial engineering including derivatives was being pointed to as the cause of the global financial crisis that had started in Wall Street, and globalization was therefore said to be the main culprit behind the crisis. However, we all know now the irony that globalization has progressed further during the course of our overcoming the crisis. Considering this situation, we have had no choice but to pursue globalization vigorously. It goes without saying that, looked at from the standpoint of long-term national economic development, this trend is inevitable. Therefore I believe this is not a matter of choice and should be pursued. The most crucial point is that, since the sectors that are already open will fall behind if they do not maintain competitiveness, therefore, it is the competitiveness of sectors that are not yet open that will determine the national competitiveness. I have often mentioned this view, through various channels. It cannot be stressed strongly enough how important a balanced system is in a country or an organization. A system comprehensively means incentives, including rewards and punishments. Internal competition is important, but can easily be evaluated from domestic political or ideological perspectives. And so as an alternative we thought it appropriate to use global standards. While comparing and analyzing the systems of advanced economies, including their central banking systems, during the two years from early 1995 when I served as chief negotiator for Korea's OECD membership, I came to a clear understanding of the importance of globalization. And since taking the position of Governor of Korea's central bank, this understanding was the reason why I have never once hesitated in the pursuit of "a Global BOK".

I believe moreover that to keep asking ourselves the philosophical and introspective question of "What is the Bank of Korea for me, and what am I for the Bank of Korea?" will serve as a catalyst for our self-development. We can easily find that, in a new organization, its members think that they should work together to build it up. But people who have spent their entire careers in an organization with a long history, they are soaked in its culture and do not place much importance on nurturing their organization further. This might be because, while interests among individuals can be easily identified, the interests of an organization are hard to identify. It might also be because we have not paid much attention to this issue. In a word, it is not easy to look at yourself. This is the same as If you do not tighten self-discipline by yourself, you cannot develop. Particularly when the external environment is changing rapidly, you have to be able to identify these developments. To build up such a capacity, I think you need to keep asking yourself the question. Leadership that presents a vision is of course also important.

It has also not been easy to convince our staff of the reasons why such expressions as 'core policy department' should no longer be used, and why peripheral departments should lead innovation. It is understandable that successful people in an organization are not very motivated to change it. Moreover, at an organization in which a majority of its members spend most of their careers, they will not be happy to leave the easy, routine paths that they are used to following, making it even more difficult to attempt to reform the organization based upon the support of its members. However, we cannot expect our organization to develop if we keep doing the same things.³⁵ This is why it is rare for once-great private

³⁵ Einstein emphasized the importance of making changes, and even said that the definition of insanity was "doing the same thing over and over again and expecting different results." Of course if a reform is initiated from the top down, without voluntary cooperation from the organization members, and if they do not sympathize with the reform effort, the reform cannot be expected to be successful in the long term. If expectations are formed that the organizational governance will not last long, and that the reform-leading group will change hands, this may encourage members not to join the reform. This may be highly likely to occur particularly in public institutions that are free from external competition, and whose heads have limited

organizations last for a very long time. Public institutions exist by law, but this does not mean that they do not also need to change, as organizations are required to evolve in line with their changing societies. Meanwhile, we all know well that a level playing field is important for the competitive development of an organization. Ensuring that everyone has a fair opportunity is the fastest way to maximize the organization's capabilities. For instance, if we understand that a central bank is founded to fulfill its functions of currency issuance and settlement, and that these roles act as major monetary policy instruments and monetary policy can work only when the central bank carries them out successfully, we can easily come to the understanding that there should not be any discrimination among departments in terms of importance. I would like to emphasize in particular that it is inappropriate to place on the periphery our regional branches and overseas offices, in which about one-third of our staff are working. This is true not only for the Bank of Korea alone, but also for our nation as a whole.

V. Leaving the Bank of Korea: unfinished business and requests

Finally, I would like to talk about some unfinished business. I hope that you will take time in dealing with them, reflecting on them earnestly and not avoid taking pains to lay a further stepping stone for the development of our bank. We should never forget that if we do not try to change ourselves, we will be forced by others. I also hope consider this based on the pride that you placed the development of the bank before your own personal interests.

It takes a great deal of time and effort to understand a central bank precisely. As a central bank is the sole institution in any country, it is essential to know the workings of other foreign central banks in order to understand it correctly. This means that even though internal experiences are necessary, to recognize central bank's weight in the national economy, understanding of other central bank's experiences is also required.³⁶ We should also be aware that there are hedging, speculative and Ponzi finance activities in the market, which the central bank deals with.³⁷ As globalization progresses, the markets have rapidly grown

- ³⁶ There can be diverse opinions as to the necessary qualifications and experiences of central bank governors. However, I do not think there can be any disagreement that central bank governors need experience with the overall economy. Former Fed chair Bernanke and current chair Yellen both served as Chairs of the Council of Economic Advisors, and there are many Fed directors who have worked in the White House. In the case of the most independent of central banks, Bundesbank, former governor Weber and current governor Weidmann have both served as economic advisors to Prime Minister Merkel. This testifies to the importance of governors gaining experience on the overall economy and on politics by working with political leaders. The thought that it is not desirable for prospective governors to build relationships with political leaders, for the sake of central bank independence, is out of line with the global trend. The cases in advanced economies are good examples showing us that central bank independence and experience in politics are independent issues.
- ³⁷ Since the global financial crisis, Minsky's Financial Instability Hypothesis has been rediscovered. The hypothesis define hedge as financial activity of paying back the principle and interest, speculative as rolling over of the principle and paying back only the interest, and Ponzi as paying back interest through sale of asset or debt issuance. In capitalism, business cycles can be caused by such endogenous activities without outside shock and these are analyzed as causing financial unrest. It is fair to say that there are always speculative capitals seeking to make profits through directional investment (including for speculation purpose) amid the increased liquidity stemming from the QE policies in advanced economies. One example which generated a lot of attention: when the BOK Base Rate was 2.75%, three-year treasury yields declined to 2.44% in April 2013, and this inversion of long- and short-term interest rates continued for a long time, disturbing our markets as a result. It is evaluated that there might be some forces that have tried to influence the market under the name of communication. Blinder (2004) said in his book 「The Quiet Revolution」 that the central bank

tenures. One point introduced in the biography of Steve Jobs draws much attention in this regard. It is that Apple does not conduct consumer demand surveys, since it believes that consumers cannot think of anything new. Talking about Ford, Jobs said that if consumers in the early 1900s had been asked what more they wanted, their answer would have been horses that could run faster and longer. In contrast to this, however, Ford created cars, putting an end to the age of carriages. Jobs' message is that it is a producer's role to present a whole new thing, for example a car, to consumers. And I think this is something that the leaders of organizations must bear in mind.

complex. I cannot help but emphasize that, without constantly checking the validity of our past experience, we cannot achieve our goals. Of course, it is not necessary to react sensitively to every directional investment in the market, but we need to keep an eye on what drives market movements, and we should not be afraid of being criticized by the market. Needless to say, we cannot allow ourselves to be looked down on for being unable to notice or understand changes in the markets domestically or abroad. We should also be aware that, when economic agents make decisions dynamically and in real time, it is very difficult to detect such changes. In particular, the relationship between the central bank and the market should not fall into the so-called "chase your own tail" situation under the name of communication.

Of course, there will be no disagreement that the central bank policy directions must be kept predicable in the medium- to long-term, through clear exchanges of information. However, when a "Minsky Moment" occurs the central bank and the market cannot move in the same directions. When market stability is a concern, it is desirable that the central bank lead the market. It is not desirable for the central bank to be led by the market. In times of uncertainty and instability, market tries to continuously test the central bank. Central bank should not be misguided by efforts to undermine the central bank under the name of communication when there is only difference of opinion.^{38, 39} The central bank should conduct its policy harmoniously, by exchanging information with the market on the one hand, while accumulating enough experiences and knowledge to maintain market discipline on the other. Although they are not easily compatible in reality, they are the ways of becoming a leading central bank.

Over the last four years I have worked without rest to carry out over 100 reform tasks. The expression "reform fatigue" might be heard in this regard, but I think it would be more appropriate to express this as the institutionalization of reform. Tasks should be carried out while keeping always mind the need to change. Fatigue comes when one is passive not when one is active in carrying out their tasks. Please remember that reform is like education: it is a journey, not a final destination. Here are some unfinished tasks:

First, in order to establish the Bank of Korea as a world leading knowledge institution, our educational and training program should be put securely in place. In the world's leading

should be independent from the market in order to maintain the term structure of interest rates. And I think that we should keep his argument in mind.

³⁸ Communication is an effective policy instrument under conditions of a zero lower bound, but whether it can be used as a monetary policy tool in emerging economies needs to be reviewed more. During the period of the Great Moderation, constructive ambiguity was for a long time regarded as a central bank communication virtue. This seems to aim at reducing risk of unnecessary noise from errors of interpreting central bank communication meant to clearly explain complex financial conditions, and at preventing herd behavior given market propensity to overreact. Many Fed reports have emphasized that guidance is a threshold, not a trigger. This emphasis is to ask the market not to understand it as commitment by the central bank. Please refer to Yellen (April 2013), "Communication in Monetary Policy," Society of American Business Editors and Writers, and Bernanke (Nov. 2013), "Communication and Monetary Policy," National Economists Club Annual Dinner. It is of course natural for the markets to be suspicious of a central bank, which has the power to set the interest rate, not following its original interest rate projections. Needless to say, good communication depends upon the degree of understanding of the economy. It is very difficult to interpret complex financial conditions, but oversimplifying the situation in order to communicate with the market can only result in the provision of inaccurate information from the long-term perspective. And so I think it is desirable to work to enhance the understandings of economic agents on financial economy, just as is done by advanced central banks.

³⁹ Whether a central bank is seen as a leader or a follower of market depends in some part on theoretical and empirical perspective regarding the market. Those who advocate the efficient market hypothesis (e.g. the Chicago school of economics) may argue that the central bank should follow the market, while those who think that the market is imperfect and its signals can be distorting (e.g. the Keynesian school) would say that the central bank should be independent from the market. Blinder called a central bank operating under the former belief a "coward central bank", and used expressions such as "don't fight the Fed" and "dogs chasing their tails".

businesses 10% of their staffs are said to be in training all the time, and we should at least target a rate one-half of that. To be effective, our educational programs should refrain from covering general content, and need to be specific to central bank tasks. I would like to remind you once again that leading central banks have sought and presented solutions to addressing the global financial crisis by becoming more academic than academia itself.⁴⁰

Second is the issue of strengthening the links between our policies and the market. To become a leading central bank, the practices in which those in charge of policies only carry out theoretical research and those in charge of market carry out observation without any logical analysis should be avoided. Central banks should develop their capabilities of analyzing and studying market changes. Without a strong theoretical foundation there can be a lack of consistency in analysis. The Bank of Korea's analytical capacity has progressed remarkably over the last few years, and if analysis is made from a comprehensive perspective, with close cooperation among the departments concerned with the markets, with policy and with research, and if the research committee promotes this cooperation, I am confident that the Bank of Korea will develop into one of the leading central banks in the world.

Third, I think central bank should actively pursue financial globalization, including globalization of the Korean won. Whether or not Korea will join the leading economies depends upon the advancements in finance and globalization is the key. But looking at the recent trends, I wonder whether we may not have lagged behind other emerging economies like China in this respect. Over the last few years, we have actively signed local currency swaps with resource-trading countries, and have expanded the scope of our tasks in this way. It is now necessary to increase the effectiveness of these measures, and if we succeed it could also provide great implications to countries without reserve currencies.⁴¹ I sincerely hope that we reassert our commitment to establishing a financial hub in Northeast Asia, through the pursuit of bold measures compatible with market rules in foreign exchange markets.

Fourth is the reestablishment of an internal evaluation system. The weight of our peer reviews is still very low. The relationships with superiors or subordinates are of course important in the office but many analyses indicate that peer reviews are the most precise evaluations, which is why many businesses value peer reviews. As no system can be introduced perfectly, it will be desirable to devote efforts to continually develop the system after its introduction.

Lastly, I would like to talk about the Bank of Korea Act, which should be handled cautiously from a long-term perspective. I think that endowing the Bank of Korea with a greater financial stability mandate is more in line with global trends. More theoretical research should be done on the compatibility of price and financial stability, but if the financial stability function is

⁴⁰ Through my emphasis of the expression "more academic than academia", I am not trying to look down on the academia, but I am trying to convey that central banks have presented theoretical and empirical materials and developed instruments necessary for overcoming the financial crisis. Academia in advanced economies has gained a reputation as a group pursuing high competitiveness, as represented by the "publish or perish" paradigm. It is expected that an era in which strict criteria are also applied to central banks will come in the future.

⁴¹ It would be very difficult to know the effects of using local currency swaps in trade settlement through the experiences of reserve currency countries. This is a question in which the choice depends on whether US dollar or local currency is economically more advantageous. This also has the advantage of hedging against the risk of exchange rate fluctuations stemming from global financial market unrest, and in this sense also serves as a partial financial safety net. As the global economy grows, this is also one way of responding to the Triffin Dilemma. I think countries without reserve currencies should find the initiative in researching this issue. The use of local currencies in trade settlement can only become established after efforts to eliminate the hurdles due to differences between systems theoretically and empirically. China is expressing great interest and this will the first step toward globalization of the won.

expanded, the need will arise for reviewing separate operations of the MPC and an FPC, just like UK. And until the conditions for this have been built up we should organize and operate a consultative body like the US FSOC to actually expand our financial stability mandate further.

I would like to wrap up my lecture now. As I mentioned earlier, it is fortunate for me to finish my tenure at a time when the global financial crisis has come almost to an end. This is because I believe that all of the measures that we have taken so far have had positive impacts. Now it is time to continuously sow the seeds for the next few years. The G20 meeting last month agreed to include in the communique that G20 countries will aim to increase their growth rates by 2%p over the next five years, and this marks a drastic turning point. There do remain structural problems in the Korean economy, including household debt and an aging population, which would have to be resolved mid- to long-term. But the growth rate at the end of 2013 was around the mid-3% level compared to end of 2012, approaching almost the potential growth rate, and the domestic and global financial markets, as indicated by variables including stocks, bonds, current accounts and exchange rates, are the most stable in the world. It is not only due to the Bank of Korea and I do not want to self-praise, but I am very proud that the Korean economy has developed to the point where it is now differentiated from other emerging economies. Korea's sovereign credit rating was upgraded by global credit rating agencies during the financial crisis, a unique case in the world, and your contributions in achieving these accomplishments during the last four years should be highly appreciated.

The title of my farewell lecture is a "World Leading Global BOK". One cannot pause even for a moment to achieve this high goal. Without exception, all of our staff needs to devote continuous efforts to becoming world number ones in their own positions. One cannot become a leading organization by work of others. We should be at least as good as other central banks. In a leading organization those in the higher ranks are very busy, while in an organization that lags behind the opposite is true. I would like to stress once again that only when we are equipped with the latest weapons can we protect the national interests in an environment of global competition. As one of a central organization of our nation, please remember that there is no greater purpose of our foundation than contributing to the development of our national economy. It is our pride to bring central bank closer to the citizens. Only the determination to walk to less traveled road would ensure success.

The last four years can be expressed as having been tumultuous. I hope that the fire that I have lit inside you keeps flaring on, and I believe that competent executives, director generals, and team heads will lead this organization well with their experiences accumulated so far. I also look forward to your initiatives so that the Bank of Korea can take off even further.

I began my farewell address by citing a line from General MacArthur, and I would like to conclude by citing again some other words that he said: "Old soldiers never die, they just fade away." I would like to just fade away now as a regular citizen, keeping in mind the precious connections that I have made with all of you. Thank you.